



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,362	09/05/2003	Ingolf Groening	2735	8248

7590 05/25/2006  
STRIKER, STRIKER & STENBY  
103 East Neck Road  
Huntington, NY 11743

EXAMINER
----------

FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/656,362

Applicant(s)

GROENING ET AL.

Examiner

Michael P. Ferguson

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 15, 2006 has been entered.

### ***Claim Objections***

2. Claims 1 and 9 are objected to because of the following informalities:

Claim 1 (line 12) recites "2 W/K m (Watt x Kelvin<sup>-1</sup> x Meter<sup>-1</sup>)". It should recite --2 W/Km--.

Claim 9 (line 2) recites "between less than 1 m and 10 m". It should recite --between 1 um and 10 um--.

Claim 15 (line 11) recites "2 W/K m (Watt x Kelvin<sup>-1</sup> x Meter<sup>-1</sup>)". It should recite --2 W/Km--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3679

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudoreille et al. (US 5,955,805).

As to claims 1-8, Chaudoreille et al. disclose a connection element **20** composed of metal and capable of a releasable connection of an electric motor (connected to an alternator via bearing **10**; shown in Figure 2) with a machine or a machine part **34** which is driven by the electric motor, the connecting element comprising at least one first abutment surface mountable on a wall of the machine or the machine part **34**, and at least one second abutment surface fixedly connected with the electric motor (via bearing **10**), at least one of the at least one first abutment surface and the at least one second abutment surface being provided with a thin metallic hard coating **32** (coating **32** is made on a relatively hard material compared to other known materials) applied on (disposed on) and non-detachably connected with the at least one abutment surface (coating **32** is non-detachably connected to the first abutment surface, if one chooses not to remove the coating), which thin metallic hard coating is not a gasket attachable to and separable from the at least one abutment surface (coating **32** is an electrical insulator; column 4 lines 4-6), with a thermal conductivity (Figures 1 and 2).

Chaudoreille et al. fail to disclose a connection element wherein the thin metallic coating has a thermal conductivity having a value smaller than 2 W/Km; and has a nitrated titanium, a nitrated titanium mixed with carbon, a nitrated alloy of titanium and aluminum, a chromium mixed with carbon, a nitrated chromium, a tungsten carbide, or a tungsten mixed with carbon.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connection element as disclosed by Chaudoreille et al. wherein the thin metallic coating has a thermal conductivity having a value smaller than 2 W/Km; and has a nitrated titanium, a nitrated titanium mixed with carbon, a nitrated alloy of titanium and aluminum, a chromium mixed with carbon, a nitrated chromium, a tungsten carbide, or a tungsten mixed with carbon as such practice is a design consideration within the skill of the art.

As to claim 9, Chaudoreille et al. fail to disclose a connection element wherein the thin metallic coating has a thickness between 1 um and 10 um.

The applicant is reminded that a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connection element as disclosed by Chaudoreille et al. wherein the thin metallic coating has a thickness between 1 um and 10 um as such practice is a design consideration within the skill of the art.

As to claim 10, Chaudoreille et al. disclose a connection element **20** wherein the first abutment surface is provided with a blind hole **51,63** with an inner thread for

Art Unit: 3679

screwing connection of the connecting element on the machine or on the machine part **34** (Figures 1 and 2).

As to claim 11, Chaudoreille et al. disclose a connection element **20** wherein the inner thread of the first abutment surface is provided with the thin metallic coating **32** (Figure 2).

As to claim 12, Chaudoreille et al. disclose a connection element **20** wherein the second abutment surface is provided with a throughgoing opening **52,62** for screw connection of the electric motor (the alternator via bearing **10**) with the connecting element (Figure 2).

As to claim 13, Chaudoreille et al. disclose a connection element **20** wherein the throughgoing opening **52,62** (on the first abutment surface of the throughgoing opening) is provided with the thin metallic coating **32** (Figure 2).

As to claim 14, Chaudoreille et al. disclose a connection element **20** comprising integrate cooling conduits **14** for circulation of cooling fluid (Figures 1 and 2).

As to claims 1-8, Chaudoreille et al. disclose a connection element **20** composed of metal and capable of a releasable connection of an electric motor (connected to an alternator via bearing **10**; shown in Figure 2) with a machine or a machine part **34** which is driven by the electric motor, the connecting element comprising at least one first abutment surface mountable on a wall of the machine or the machine part **34**, and at least one second abutment surface fixedly connected with the electric motor (via bearing **10**), at least one of the at least one first abutment surface and the at least one second abutment surface being provided with a thin metallic hard coating **32** (coating **32**

Art Unit: 3679

is made on a relatively hard material compared to other known materials) applied on (disposed on) and non-detachably connected with the at least one abutment surface (coating **32** is non-detachably connected to the first abutment surface, if one chooses not to remove the coating), with a thermal conductivity (Figures 1 and 2).

Chaudoreille et al. fail to disclose a connection element wherein the thin metallic coating has a thermal conductivity having a value smaller than 2 W/Km.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connection element as disclosed by Chaudoreille et al. wherein the thin metallic coating has a thermal conductivity having a value smaller than 2 W/Km as such practice is a design consideration within the skill of the art.

Applicant is reminded that **process limitations are given little patentable weight in product claims** since the patentability determination of product-by-process claims is based on the product itself, even though such claims are limited and defined by the process. See MPEP § 2113. "The patentability of a product does not depend on its method of production. " In re Thorpe, 777 F.2d 695,698,USPQ 964,966 (Fed.Cir.1985).

As to claim 16, Chaudoreille et al. disclose a connection element wherein the thin metallic hard coating **32** is also applied in threaded openings **51,63** of the connection element **20** (Figures 1 and 2).

***Response to Arguments***

5. Applicant's arguments filed May 15, 2006 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

Chaudoreille et al. do not disclose a connection element comprising at least one of the at least one first abutment surface and the at least one second abutment surface being provided with a thin metallic hard coating applied on and *non-detachably* connected with the at least one abutment surface, *which thin metallic hard coating is not a gasket attachable to and separable from the at least one abutment surface.*

Examiner disagrees. As to claim 1, Chaudoreille et al. disclose a connection element **20** comprising at least one of the at least one first abutment surface and the at least one second abutment surface being provided with a thin metallic hard coating **32** (coating **32** is made on a relatively hard material compared to other known materials) applied on (disposed on) and non-detachably connected with the at least one abutment surface (coating **32** is non-detachably connected to the first abutment surface, if one chooses not to remove the coating), which thin metallic hard coating is not a gasket attachable to and separable from the at least one abutment surface (coating **32** is an electrical insulator; column 4 lines 4-6, Figures 1 and 2).



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
MPF  
05/22/06



DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

APPROVED  
5/18/06

1/1

REPLACEMENT SHEET

Fig. 1

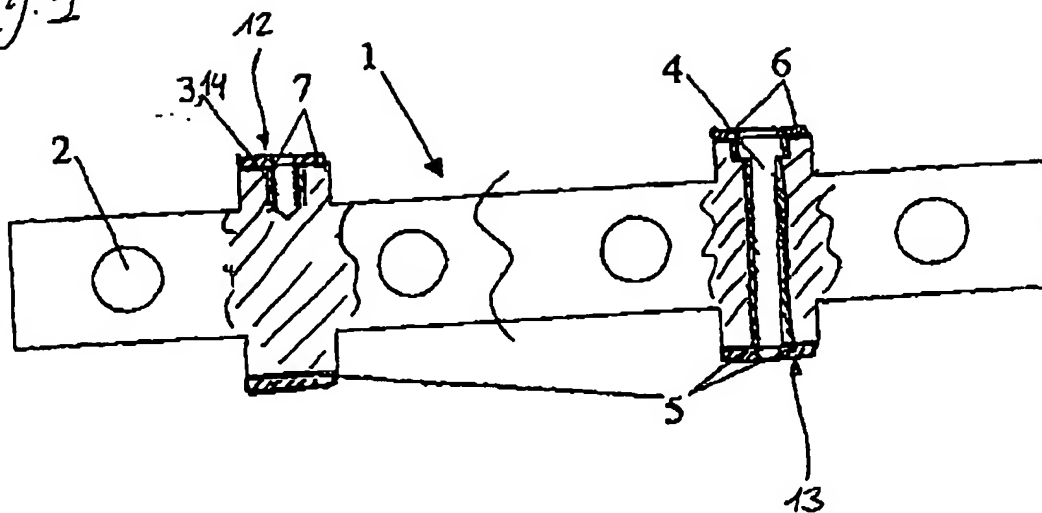


Fig. 2

